This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : DuPont™ Sentrallas™ Herbicide
Tradename/Synonym : DPX-R7U12 180 OD
Thifensulfuron Methyl: Methyl 3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl) amino]carbonyl]amino]sulfonyl]-2-thiophenecarboxylate
Fluroxypyr 1-methylheptyl ester: ((4-amino-3,5-dichloro-6-fluoro-2-pyridinyl)oxy)acetic acid, 1-methylheptyl ester
Acid Equivalent: Fluroxypyr: ((4-amino-3,5-dichloro-6-fluoro-2pyridinly)oxy)acetic acid – 15.2%

Product Use : Herbicide
Restrictions on use : Do not use product for anything outside of the above specified uses

Manufacturer/Supplier : DuPont
974 Centre Road
Wilmington, DE 19805, USA

Product Information : 1-800-441-7515 (outside the U.S. 1-302-774-1000)
Medical Emergency : 1-800-441-3637 (outside the U.S. 1-302-774-1139)
Transport Emergency : CHEMTREC: +1-800-424-9300 (outside the U.S. +1-703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION

Product hazard category
Skin sensitisation Category 1
Label content
Pictogram: 

Signal word: Warning

Hazardous warnings: May cause an allergic skin reaction.

Hazardous prevention measures:
- Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective gloves.
- IF ON SKIN: Wash with plenty of soap and water.
- If skin irritation or rash occurs: Get medical advice/ attention.
- Wash contaminated clothing before reuse.
- Dispose of contents/ container to an approved waste disposal plant.

Other hazards
Information presented in Section 2 conforms to the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard of 2012. See Section 15 for applicable information conforming to the requirements of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as required by the US Environmental Protection Agency (EPA), or by state Regulatory Agencies.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thifensulfuron methyl</td>
<td>79277-27-3</td>
<td>3%</td>
</tr>
</tbody>
</table>
SECTION 4. FIRST AID MEASURES

General advice: Information presented in Section 4 conforms to the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard of 2012. See Section 15 for applicable information conforming to the requirements of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as required by the US Environmental Protection Agency (EPA), or by state Regulatory Agencies. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies involving this product, call toll free 1-800-441-3637. See Label for Additional Precautions and Directions for Use.

Inhalation: No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.

Skin contact: Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Eye contact: The material is not likely to be hazardous by eye contact, but flushing the eye if contact occurs is advisable. Consult a physician if necessary.

Ingestion: No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.

Most important symptoms/effects, acute and delayed: No applicable data available.

Protection of first-aiders: No applicable data available.

Notes to physician: No applicable data available.
## SECTION 5. FIREFIGHTING MEASURES

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable extinguishing media</td>
<td>Water spray, Dry chemical, Foam, Carbon dioxide (CO2)</td>
</tr>
<tr>
<td>Unsuitable extinguishing media</td>
<td>High volume water jet, (contamination risk)</td>
</tr>
<tr>
<td>Specific hazards</td>
<td>No applicable data available.</td>
</tr>
<tr>
<td>Special protective equipment for firefighters</td>
<td>Wear full protective clothing and self-contained breathing apparatus.</td>
</tr>
<tr>
<td>Further information</td>
<td>(on small fires) If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers/tanks with water spray.</td>
</tr>
</tbody>
</table>

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**NOTE:** Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safeguards (Personnel)</td>
<td>Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus. Use personal protective equipment.</td>
</tr>
<tr>
<td>Environmental precautions</td>
<td>Prevent material from entering sewers, waterways, or low areas.</td>
</tr>
<tr>
<td>Spill Cleanup</td>
<td>Soak up with sawdust, sand, oil dry or other absorbent material. Dispose of in an approved container.</td>
</tr>
<tr>
<td></td>
<td>If liquid has been spilt in large quantities clean up promptly by scoop or vacuum.</td>
</tr>
<tr>
<td>Accidental Release Measures</td>
<td>Never return spills in original containers for re-use. Dispose of in accordance with local regulations.</td>
</tr>
</tbody>
</table>

## SECTION 7. HANDLING AND STORAGE

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handling (Personnel)</td>
<td>Wash hands thoroughly with soap and water after handling and before eating,</td>
</tr>
<tr>
<td></td>
<td>4 / 12</td>
</tr>
</tbody>
</table>


drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Handling (Physical Aspects): Keep away from heat and sources of ignition.

Dust explosion class: No applicable data available.

Storage:
- Do not contaminate water, other pesticides, fertilizer, food or feed in storage.
- Store in original container. Keep tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

Storage period: No applicable data available.

Storage temperature: No applicable data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified for "Applicators and Other Handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

Personal protective equipment
- Respiratory protection: Where there is potential for airborne exposures in excess of applicable limits, wear approved respiratory protection with dust/mist cartridge.
- Skin and body protection: Mixers, loaders, applicators and other handlers must wear:
  - Long sleeved shirt and long pants
  - Shoes plus socks
  - PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:
    - Coveralls
    - Chemical resistant gloves made of any waterproof material, such as polyethylene or polyvinyl chloride.
    - Shoes plus socks
Protective measures: Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Use this product in accordance with its label.

Exposure Guidelines
Exposure Limit Values

<table>
<thead>
<tr>
<th>Chemical</th>
<th>AEL * (DUPONT)</th>
<th>Exposure Limit</th>
<th>TWA</th>
<th>Total dust.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thifensulfuron methyl</td>
<td>5 mg/m3</td>
<td>8 &amp; 12 hr.</td>
<td>TWA</td>
<td>Total dust.</td>
</tr>
<tr>
<td>Fluroxypyr-methyl</td>
<td>No applicable data available.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Physical state: liquid
Form: liquid
Color: light grey
Odor: solvent-like

Odor threshold: No applicable data available.

pH: 4.0 - 5.0

Melting point/range: No applicable data available.
Boiling point/boiling range: No applicable data available.
Flash point: 96 °C
Evaporation rate: No applicable data available.
Flammability (solid, gas) : No applicable data available.
Upper explosion limit : No applicable data available.
Lower explosion limit : No applicable data available.
Vapour Pressure : No applicable data available.
Vapour density : No applicable data available.
Specific gravity (Relative density) : No applicable data available.
Bulk density : 0.89 - 1.09 g/cm³
Water solubility : emulsifiable
Solubility(ies) : No applicable data available.
Partition coefficient: n-octanol/water : No applicable data available.
Auto-ignition temperature : No applicable data available.
Decomposition temperature : No applicable data available.
Viscosity, kinematic : No applicable data available.
Viscosity, dynamic : 505.2 mPa.s at 20 °C (68 °F)
Oxidizing Substance : The product is not oxidizing.

SECTION 10. STABILITY AND REACTIVITY
Reactivity : No applicable data available.
Chemical stability : Stable at normal temperatures and storage conditions.
Possibility of hazardous reactions : Polymerization will not occur.
Conditions to avoid : None reasonably foreseeable.
Incompatible materials : No materials to be especially mentioned.
SECTION 11. TOXICOLOGICAL INFORMATION

DuPont™ Sentrallas™ Herbicide

Inhalation 4 h LC50 : > 5.4 mg/l, Rat
Dermal LD50 : > 5,000 mg/kg, Rat
Oral LD50 : > 5,000 mg/kg, Rat
Skin irritation : No skin irritation, Rabbit
Eye irritation : No eye irritation, Rabbit
Sensitisation : May cause sensitisation by skin contact., mice

Further information : Information presented in this Section conforms to the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard of 2012. See Section 15 for applicable information conforming to the requirements of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as required by the US Environmental Protection Agency (EPA), or by state Regulatory Agencies.

Thifensulfuron methyl

Repeated dose toxicity : The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

- Oral - feed multiple species
- Reduced body weight gain

Carcinogenicity : Animal testing did not show any carcinogenic effects.

Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Animal testing did not show any mutagenic effects.

Reproductive toxicity : No toxicity to reproduction
Animal testing showed no reproductive toxicity.
DuPont™ Sentrallas™ Herbicide

Teratogenicity: Did not show teratogenic effects in animal experiments. Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

Fluroxypyr-meptyl
Carcinogenicity: Not classifiable as a human carcinogen. Information given is based on data obtained from similar substances.

Mutagenicity: Animal testing did not show any mutagenic effects. Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Reproductive toxicity: No toxicity to reproduction

Teratogenicity: Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

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Carcinogenicity
The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity
Thifensulfuron methyl
96 h LC50: Oncorhynchus mykiss (rainbow trout) > 100 mg/l
14 d EC50: Lemna minor (duckweed) 0.0013 mg/l
48 h EC50: Daphnia magna (Water flea) 470 mg/l
28 d NOEC: Americamysis bahia (mysid shrimp) 7.93 mg/l

Fluroxypyr-meptyl
96 h LC50: Oncorhynchus mykiss (rainbow trout) > 0.225 mg/l OECD Test
Guideline 203

| 72 h EC50   | Scenedesmus quadricauda (Green algae) > 0.47 mg/l |
| 48 h EC50   | Daphnia magna (Water flea) > 0.183 mg/l OECD Test Guideline 202 |

Environmental Fate

**Fluroxypyr-meptyl**

Bioaccumulation: Bioaccumulation is unlikely.

Additional ecological information:

Environmental Hazards: This product is toxic to fish. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply where/when conditions favour runoff. Do not apply where weather conditions favour drift from areas treated. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate. See product label for additional application instructions relating to environmental precautions.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods - Product:

Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Waste disposal methods - Container:

Refer to the product label for instructions. Do not transport if this container is damaged or leaking. In the event of a major spill, fire or other emergency, call 1-800-441-3637 day or night.

Contaminated packaging:

No applicable data available.

SECTION 14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>IATA_C</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3082</td>
<td>Environmentally hazardous substance, liquid, n.o.s.</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Fluroxypyr meptyl, Thifensulfuron-methyl)</td>
<td></td>
</tr>
</tbody>
</table>

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SECTION 15. REGULATORY INFORMATION

Other regulations: This Safety Data Sheet is for a pesticide product registered by the US Environmental Protection Agency (USEPA) and various state regulatory agencies, and is therefore also subject to certain requirements under US and state pesticide laws, including the Federal Insecticide Fungicide and Rodenticide Act (FIFRA). These requirements differ from the classification criteria and hazard information required by OSHA for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is information determined by USEPA, and various states.

CAUTION!

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. This product is toxic to: Aquatic invertebrates

SARA 313 Regulated Chemical(s): This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

EPA Reg. No.: 352-897
In the United States this product is regulated by the US Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). It is a violation of Federal law to use this product in
a manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

SECTION 16. OTHER INFORMATION

™ Trademark of E.I. du Pont de Nemours and Company.
® Registered trademark of E.I. du Pont de Nemours and Company

Revision Date : 11/10/2015

Contact person : DuPont Crop Protection, Wilmington, DE, 19898, Phone: 1-888-638-7668

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Significant change from previous version is denoted with a double bar.